

REMARKS

Claims 1 through 3 and 6 through 18 are pending in this application, of which claims 8 through 17 stand withdrawn from consideration pursuant to the provisions of 37 C.F.R. §1.142(b). Accordingly, claims 1 through 3, 6, 7 and 18 are active.

Claims 1, 6 and 18 have been amended. Care has been exercised to avoid the introduction of new matter. Indeed, adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclose, as, for example, the depicted embodiments and related discussion thereof in the written description of the specification. Applicants note that claim 6 has been amended to eliminate redundant language, as claim 6 depends from claim 1. Applicants submit that the present Amendment does not generate any new matter issue. Accordingly, entry of the present Amendment and Remarks, and favorable consideration, are respectfully solicited.

Claims 1 through 3, 6, 7 and 18 were rejected under 35 U.S.C. §102 for lack of novelty as evidenced by Kameyama (U.S. Pat. No. 4,472,240). In the statement of rejection the Examiner referred to Figure 12H asserting the depiction of a semiconductor device corresponding to that claimed. Applicants respectfully traverse.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the possession of one having ordinary skill in the art. *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994). Moreover, there are significant differences between the

claimed invention and the device disclosed by Kameyama that would preclude the factual determination that Kameyama identically describes the claimed inventions within the meaning of 35 U.S.C. § 102.

Claims 1 and 18, recite in pertinent part, that the first side surface of the trench extends downwardly from the main surface of the semiconductor substrate. Applicants submit that in Kameyama's semiconductor device, the trench does not have a first perpendicular side surface extending downwardly from the main surface of the semiconductor substrate. Rather, it is only an inclined side surface that extends downwardly from the main surface of the semiconductor substrate. A vertical side surface portion extends above the main surface of the semiconductor substrate, but not below. Accordingly, Kameyama fails to identically describe the claimed inventions within the meaning of 35 U.S.C. § 102 and, therefore, the rejection should be withdrawn.

Claims 1 through 3, 6, 7 and 18 were rejected under 35 U.S.C. §102 for lack of novelty as evidenced by Tsang et al. (U.S. Pat. No. 5,358,891, hereinafter "Tsang"). In the statement of the rejection the Examiner referred to Figure 3f of Tsang asserting the depiction of a semiconductor device corresponding to that claimed. The Examiner asserted that the trench has first side surface which is substantially perpendicular to the main surface of the semiconductor layer. Applicants respectfully traverse.

Applicants submit that the semiconductor device depicted by Tsang in Figure 3f does not have a trench with a first side surface extending downwardly which is substantially perpendicular to the main surface of the semiconductor substrate, as required by independent claims 1 and 18. Rather, it should be apparent that by virtue of forming a thermal oxide, the side surfaces shown in Figure 3a are oxidized and form a

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curved surface as shown in Figure 3f. Accordingly, Tsang fails to identically describe the claimed inventions within the meaning of 35 U.S.C. § 102 and, therefore, the rejection should be withdrawn.


Moreover, dependent claim 6 is free from the applied art. Claim 6 requires that the third side surface is linearly inclined with respect to the main surface of the semiconductor substrate. Neither reference teaches nor suggests this claimed feature.

It is believed that all pending claims are now in condition for allowance. Applicants therefore respectfully request an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicants' representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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